



March 17, 2025

Dr. Jennifer McLain
Director
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Submitted via email

RE: Federalism Consultation on the Proposed National Primary Drinking Water Regulation for Perchlorate

Dear Dr. McLain,

The Association of Metropolitan Water Agencies (AMWA) appreciates the opportunity to engage with the rule development for the *Proposed National Primary Drinking Water Regulation for Perchlorate* through the Federalism consultation process. AMWA members consist of the largest publicly owned utilities in the United States, collectively providing safe and affordable drinking water to more than 160 million people. Any changes in the development of National Primary Drinking Water Regulations (NPDWR) directly impact our members.

AMWA commented on the proposed rulemaking in 2019, in which EPA noted that “perchlorate occurrence information suggests that at an MCL of 56 µg/L only 2 systems...would exceed the regulatory threshold,” thereby making AMWA question whether a “meaningful opportunity for health risk reduction” would be offered by that rulemaking. Based on the limited benefit demonstrated by the three proposed Maximum Contaminant Levels (MCLs), AMWA supported the withdrawal of the rule. While EPA is now required to promulgate a perchlorate NPDWR based on a court decision, despite the limited number of public water systems with high levels of this contaminant, AMWA recommends that the proposal consider the recommendations described in this comment to minimize impacts to the majority of systems nationwide not experiencing high levels of perchlorate.

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These recommendations are, in summary:

- Use the well-established approach afforded by National Academies of Science and Medicine in the determination of an MCL;
- Streamline the monitoring process, reducing the approval requirements by primacy agencies for waivers;
- Ensure public notification requirements are commensurate with the risk and populations affected by perchlorate; and
- Reanalyze national occurrence data for perchlorate, including data from California and Massachusetts.

Approach to Developing MCL and MCLG

In 2019, EPA leveraged the Biologically Based Dose-Response (BBDR) Model for Perchlorate, which prioritized neurodevelopmental endpoints, proposing an MCL/MCLG of 56 µg/L and requested comment on alternative MCLs of 18 µg/L and 90 µg/L.¹ The three candidate MCLs were selected based on a 1%, 2%, or 3% decline in IQ (or a 1, 2, or 3-point decline) in the most sensitive population. The BBDR Model for Perchlorate is an inappropriate means of determining an MCL. After the model was initially introduced in 2017, AMWA, along with other water sector stakeholders, expressed concern over the BBDR's effectiveness as a regulatory tool, and those concerns have not yet been abated by improvements in the approach.²

The primary flaw in the BBDR model is the focus on the first trimester of pregnancy and failure to incorporate data from late trimesters and infancy. This approach fails to encompass all relevant data and introduces biases and uncertainties that were not addressed in the initial establishment of the MCL/MCLG.

These uncertainties are amplified through a lack of accounting for potential confounding factors or biases within the data used to calibrate and produce model inputs. The BBDR model fails to properly account for the role of iodine deficiency in thyroid dysfunction, wherein potential findings may be exacerbated by iodine concentration rather than perchlorate exposure. The studies used for the model also do not outline controls for food consumption, which has been shown to contribute more substantially to perchlorate intake than drinking water.³

AMWA instead recommends the alternative approach established by the National Academies of Science and Medicine, which incorporates the direct application of data as well as potential sources of uncertainty.⁴ EPA relied on this methodology in previous assessments of

¹ https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=OGWDW&dirEntryID=311220

² <https://www.regulations.gov/comment/EPA-HQ-OW-2016-0438-0030>

³ Huber, D. R., Blount, B. C., Mage, D. T., Letkiewicz, F. J., Kumar, A., and Allen, R. H. (2011). Estimating perchlorate exposure from food and tap water based on US biomonitoring and occurrence data. *J. Expo. Sci. Environ. Epidemiol.* 21, 395–407.

⁴ National Research Council of the National Academy (2005), Health Implications of Perchlorate Ingestion. <https://nap.nationalacademies.org/catalog/11202/health-implications-of-perchlorate-ingestion>

perchlorate, and decided on a reference dose (RfD) of 0.0007 milligrams per kilogram per day (mg/kg/day), equivalent to a drinking water concentration of 24.5 µg/L. As AMWA and other commenters have suggested, this approach uses a more well-established approach than the BBDR Model, with iodine uptake as the measured health outcome. In turn, this provides a simpler framework for regulatory development and eliminates the potential for confounding and uncertainty that is amplified through the use of the BBDR.

EPA has expressed that the updated health effects analysis will be ongoing until the rule proposal. As such, AMWA requests a reasonable period of time for review of that analysis in addition to the rule proposal to provide thorough comments in the future.

Monitoring and Waivers

AMWA concurs with the American Water Works Association’s proposal for a monitoring program as an alternative to the proposed Standardized Monitoring Framework. This approach will minimize burdens on primacy agencies, streamline the process for reduced monitoring, and demonstrate effective management of the risks presented by perchlorate.

As shown in the table below, sampling data collected by a utility in the five years preceding the deadline established by the rule should satisfy the initial monitoring period, to further facilitate a transition to reduced monitoring for the upwards of 99% of systems expected to identify perchlorates at levels below the MCL.

Monitoring Framework	Surface Water	Groundwater
Initial monitoring period (first year)	4 quarterly samples	2 quarterly samples
If initial monitoring is reliably and consistently (R&C) below MCL	1 sample every 3 years	1 sample every 3 years
If R&C <MCL after 3 consecutive 3-year periods	1 sample every 9 years	1 sample every 9 years
If >MCL or not R&C <MCL	4 quarterly samples	2 quarterly samples

As demonstrated in this table, AMWA recommends defining “reliably and consistently below the MCL” as equal to one-half of the MCL. This proposed protocol would eliminate the inefficiencies associated with individual approval of waivers by primacy agencies, and enable an automatic reduction in monitoring and the according water system burden based on demonstrated occurrence levels well below the MCL. Accordingly, when determining costs resulting from this rule, EPA should incorporate the number of entry points to the system required to undertake initial and routine monitoring.

Public Notification

In the event of a violation of the MCL based on elevated perchlorate levels in drinking water, AMWA recommends that this violation warrant a Tier 2 public notice. Given that the vulnerable life stage is for a narrow population, during the second trimester of pregnancy for women with low iodide levels, language should be clear on what actions customers can take if they are in the high-risk category for exposure. EPA should make every possible effort to ensure that proposed language does not create widespread fear, and erode trust in the affected water supply.

Occurrence Data

In 2019, EPA did not incorporate perchlorate occurrence data from California and Massachusetts in its proposal of several MCL options ([84 FR 30542](#)). While this data would be inappropriate to incorporate in a cost-benefit analysis as it would not accurately represent costs imposed by a national standard in these two states with existing standards, this data should be included in EPA's overall updated evaluation of occurrence.

Conclusion

More than nine states have established health advisories or other measures for perchlorate in drinking water since national occurrence was determined in the first Unregulated Contaminant Monitoring Rule. This, along with ongoing remediation efforts, has contributed to a clear decline in levels of perchlorate in drinking water nationwide.

As EPA develops its proposed National Primary Drinking Water Regulation for perchlorate, AMWA asks EPA to consider materials that may be more appropriate in guidance documents versus the regulation itself, such as: (1) additional information on proper storage and handling of hypochlorite solutions to manage perchlorate formation, and (2) materials to support remediation and cleanup standards for perchlorate-impacted sites in Nevada near the Colorado River to protect downstream states that rely on the Colorado River as a major source of drinking water.⁵

AMWA also advises that this rule should incorporate the considerations of the upcoming *Microbial and Disinfection Byproducts Rule* revisions, expected in the summer of 2025. If these rule revisions lead to disinfection practices promoting on-site generation of hypochlorite, this would create challenges with simultaneous compliance.

AMWA thanks EPA for the opportunity to provide comments on this Federalism consultation in advance of a proposed perchlorate NPDWR. AMWA looks forward to continued collaboration in the development of a rule that acknowledges the existing state-level successes in managing the risks presented by perchlorates, and the minimization of burdens on public water systems that have no history of perchlorate occurrence meeting the MCL in their source water.

⁵ https://www.epa.gov/sites/default/files/2020-05/documents/perchlorate_reductions_5.14.20.pdf

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If there is any additional information needed on these comments, please contact AMWA's Manager of Regulatory and Scientific Affairs, Kaline Gabriel, at gabriel@amwa.net.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Dobbins". The signature is fluid and cursive, with a long horizontal stroke at the end.

Thomas Dobbins
Chief Executive Officer
Association of Metropolitan Water Agencies

CC: NPDWRperchlorate@epa.gov
Jess Kramer, Office of Water
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